

Title (en)
ORAL IRRIGATOR WITH INTERDENTAL SPACE SENSING

Title (de)
MUNDDUSCHE MIT INTERDENTALRAUMERFASSUNG

Title (fr)
IRRIGATEUR ORAL AVEC DÉTECTION D'ESPACE INTERDENTAIRE

Publication
EP 4196045 C0 20240221 (EN)

Application
EP 21765589 A 20210812

Priority
• EP 20191329 A 20200817
• EP 2021072438 W 20210812

Abstract (en)
[origin: EP3957271A1] A system for oral irrigation comprises a fluid delivery tube with a proximal end and a distal end. The proximal end is configured to receive fluids for oral irrigation. The system also comprises a nozzle at the distal end of the fluid delivery tube with an aperture for fluid delivery. The nozzle is configured to at least partially obstruct the flow of fluid from the fluid delivery tube through the nozzle when the aperture is in contact with a tooth relative to when the aperture is away from said contact. A pump is configured to pump fluids through the fluid delivery tube based on a pump configuration and a sensor is used for sensing a pressure or flow rate in the fluid delivery tube. A controller is configured to detect whether the nozzle is in an interdental space based on the sensor detecting a pressure drop or a flow rate increase in the fluid delivery tube and adjust the pump configuration based on the nozzle being in an interdental space.

IPC 8 full level
A61C 17/02 (2006.01); **A61C 17/22** (2006.01)

CPC (source: EP US)
A61C 17/0202 (2013.01 - EP US); **A61C 17/0217** (2013.01 - US); **A61C 17/221** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Participating member state (EPC – UP)
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)
EP 3957271 A1 20220223; CN 115955948 A 20230411; EP 4196045 A1 20230621; EP 4196045 B1 20240221; EP 4196045 C0 20240221; JP 2023532610 A 20230728; JP 7378667 B2 20231113; US 2024008964 A1 20240111; WO 2022038022 A1 20220224

DOCDB simple family (application)
EP 20191329 A 20200817; CN 202180050564 A 20210812; EP 2021072438 W 20210812; EP 21765589 A 20210812; JP 2023511809 A 20210812; US 202118021528 A 20210812